12–36 months post-LMT initiation (follow-up), were included. Target levels for LDL-C were defined as per NCEP ATP III guidelines. Recommended levels for HDL-C were >40 mg/dL for men and >50 mg/dL for women, and <150 mg/dL for TG. **RESULTS:** We identified 556 high CHD risk patients, mean age 63.6 (SD10.6) years and 55.9% patients were male. Ninety-five percent had initiated statin mono or combination therapy. Baseline mean values for LDL-C and HDL-C were 159.5 mg/dL (SD38.4) and 52.3 mg/dL (SD16.4), respectively. The median TG level was 140 mg/dL (IQR: 104–198 mg/dL). The reductions in mean LDL-C, HDL-C and TG from baseline were 26.4%, 0.1% and 8%, respectively. At follow-up, of the total patients with LDL-C not at goal (48.9%), 47.1% had only LDL-C not at goal, 52.9% had both LDL-C not at goal and HDL-C and/or TG not at goal, and 19.4% had all three lipid components not at goal. **CONCLUSIONS:** In this cohort of mostly statin-treated high risk patients, barely half of them had achieved LDL-C target levels 12–36 months after LMT initiation. Among those with LDL-C not at goal, about 53% of patients experienced HDL-C and/or TG also not at goal indicating high prevalence of multiple lipid disorders.

PCV14

CENTRALISED PAN-EUROPEAN SURVEY ON THE UNDER-TREATMENT OF HYPERCHOLESTEROLEMIA IN PATIENTS USING LIPID LOWERING DRUGS (CEPHEUS-GREECE)

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OBJECTIVES: Surveys evaluating plasma lipid goal attainment in coronary heart disease (CHD) patients have shown that hypercholesterolemia is inadequately treated. The aim of this survey was to evaluate the use and efficacy of lipid lowering drugs (LLD) and to identify factors associated with failure to reach LDL-C target. **METHODS:** CEPHEUS-Greece was part of a European multi-centre, cross-sectional survey performed during a single visit in 8 countries and included patients on LLD for ≥3 months without a dose change for at least 6 weeks. Fasting lipid samples were analysed in a central laboratory. Physicians and patients completed a questionnaire, covering various aspects of hypercholesterolemia. **RESULTS:** 175 Greek physicians (48.6% in primary care, 47.4% cardiologists, 4.0% other) recruited consecutive patients in 2006–2007. The full analysis set population comprised 1321 patients. Mean (±SD) age was 61.7 (11.3) years (44.8% females) and waist circumference 96.2 (14.4) cm. 28% were smokers, while 60.7%, 35.4% and 25.1% of patients had a history of hypertension, CHD or diabetes, respectively. 83.6% of patients were on statin monotherapy. 53.9% remained on their starting dose of LLD with no adjustment. Overall, 49.7% and 49.3% of patients reached the Third Joint European Task Force and the 2004-updated NCEP ATP III LDL-C goal, respectively. Only 14.7% of the very high-risk population reached the 2004-updated NCEP ATP III target (LDL-C < 70 mg/dl or 1.8 mmol/l). Multivariate analyses showed that smoking status (non-smokers vs smokers, OR: 2.17 [95% CI: 1.59–2.95]) and history of CHD (no history vs history, OR: 4.89 [95% CI: 3.57–6.69]) were strong determinants for reaching LDL-C target. **CONCLUSIONS:** Almost 50% of Greek patients using LLD are not on target for LDL-C. In addition to lifestyle interventions, selection of an appropriate treatment strategy, adherence to guidelines and improvement of patient compliance may have a significant impact on reaching LDL-C target.

PCV15

CORONS STUDY: EXAMPLE OF STATINS IMPACT ON ALL CAUSE MORTALITY IN THE ELDERLY

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OBJECTIVES: To assess the relationship between statin therapy on mortality risk in usual care management of elderly. **METHODS:** The present study is a population-based, observational, longitudinal study performed on 59,398 subjects aged 70 years or older, between 2000 and 2005 in Northern France (266,071 person-years). The data was extracted from a French administrative managed care database (CANSSM). Survival of incident persistent statin users was compared to survival of non lipid-lowering agent (LLA) users, thanks to multivariable Cox proportional models stratified on five-year birth cohorts adjusted on gender and hospitalizations occurring in 1999. In the same way, impact of fibrate therapy was explored. Survival of anti-glaucoma treatment (AG) users versus non AG users was also assessed as a neutral comparator model. **RESULTS:** As of January 1, 2000, 59,398 subjects over 70 years of age were included in the cohort.. The median age at baseline was 76 years of age [min: 70 / max: 107]. Overall survival at the end of follow-up was 79.3% for persistent statin users versus 61.0% for non LLA users. In the global multivariate Cox model, stratified on five-year birth cohorts and adjusted on gender and hospitalizations occurring in 1999, the HR for mortality associated with persistence of statins was 0.71 (95% CI 0.63–0.81; p < 0.0001). No statistic association was found for the survival of subjects persistent to fibrate versus non LLA users, nor for persistent AG users versus non AG users, with respectively HR = 1.05 (95% CI 0.75–1.48, adjusted; p = 0.77) and HR = 0.81 (95% CI 0.63–1.05, adjusted; p = 0.12). **CONCLUSIONS:** Although further investigation must be conducted, in particular on adjustment variables, the main results of our study suggest a beneficial impact of persistent statin therapy in reducing all cause mortality by 29%, in a large cohort of elderly.

PCV16

MONITORING POTENTIAL DRUG-DRUG INTERACTIONS—AN APPLICATION FOR PRESCRIPTION CLAIMS DATABASES

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OBJECTIVES: To understand the potential for drug-drug interactions (DDIs) among patients with diabetes and/or hypertension and multiple other comorbidities. **METHODS:** Patients were selected from the 2005 MarketScan databases who had hypertension and/or diabetes, a chronic disease score in the top 10% of the cohort, and 12 months of continuous enrollment. Concomitant medications were identified from the 12 month follow-up and tested against the DRUG-REAX system, which is used by pharmacists to check for potential DDIs and determine their clinical significance. The system includes a severity rating and documentation quality classification for the interaction potential. A DDI was counted when drugs in potentially interacting combinations with excellent or good documentation were dispensed within 30 days of each other during the time period. **RESULTS:** A total of 98,844 patients met the study criteria with 79,830 (80.7%) of them having at least one potential DDI. These patients filled an average of 28 prescriptions per year and almost 98% were over age 64. Among these patients, 306,649 unique, potential DDIs were identified with the severity rating distributed as follows: Contraindicated—0.8%; Major—29.9%; Moderate—61.1%; Minor 8.3%. Potential DDIs included: potassium chloride in combination with anticholinergics (contraindicated), potassium

chloride with lisinopril (major), furosemid with digoxin (moderate), and warfarin with levofloxacin (moderate). **CONCLUSIONS:** Potential DDIs were common in this elderly population with multiple comorbidities. While some drug combinations with potential DDIs may be clinically appropriate, they require ongoing monitoring to ensure patient safety. The large number of potential DDIs identified with these data warrants future research into the prevalence of appropriate monitoring when potentially interacting drug combinations are prescribed. This study demonstrates the utility of using prescription claims databases for identifying specific sub-populations of patients at high risk for potential DDIs and targeting appropriate areas for intervention.

PCV17

COLD AND INACTIVITY: THE ULTIMATE FACTORS FOR HEART ATTACK

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OBJECTIVES: Heart attack is diagnosed in approximately 20000 cases annually in Hungary, half of which leads to death in one year. In our study we investigated, how meteorological factors influence the figures of heart attack, whether there is a parallel relatonship between weather fronts and heart attack during the study period. **METHODS:** We analyzed data of patients admitted to hospitals in Hungary between 2000 and 2004, with the diagnosis of heart attack. During the study period 81,956 cases were recorded. We categorized patient subgroups based on the day, month and year of the admission, and the gender and age of the patients. The National Health Insurance Fund and the National Weather Service provided us with the appropriate data. Statistical analysis was performed using ANOVA and chi2-probe. **RESULTS:** During the study period we found a correlation between the incidence of heart attack cases and meteorological factors. In spring, we observed significantly more heart attacks than in other seasons ($p < 0.01$). Cold weather fronts in spring and summer positively correlated with heart attack incidence, while in autumn and winter the warm front had similar impact ($p < 0.01$). In 2002, there was a statistically significant difference between age groups below and above 50 years (p:0.069 vs. p:0.930, correspondingly). **CONCLUSIONS:** There is a statistically significant seasonality in heart attack incidence. The development of new prevention strategies must rely on the seasonal and age characteristics of the change of heart attack incidence throughout the world.

PCV18

EFFECT OF ENVIRONMENTAL TEMPERATURE AND WORKDAYS ON HEART ATTACK FIGURES

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OBJECTIVES: We investigated, wheter environmental temperature and workdays, beyond the well known risk factors, might have an impact on the figures of heart attack cases in Hungary. **METHODS:** Data analysis and retrospective data collection was used among patients diagnosed with heart attack at the Cardiology Department of the University of Pecs, Hungary in the time period between January 1, 2000 and December 31, 2004. Weather data were obtained from the Local Service of the National Weather Institute, Pecs, Pogany Airport Base. In the time period under investigation, 81.956 patients were admitted with the above diagnosis. Analysis of variance and linear regression analysis were used as statistical methods. **RESULTS:** We found that the environmental temperature influenced the incidence of heart attack in 0.79 %. This result was found to be significant ($p < 0.01$). Above 0 Co there were more heart attack cases diagnosed than below it. We observed a steady decrease in the incidence from Monday to weekend. During weekend days markedly less cases were recorded comparing to weekdays (p: 0.110 MT[0.108;0.112] vs. p: 0.155 MT[0.153;0.158], respectively). Furthermore, there was a peak in the number of cases on Monday and a drop during the weekend. **CONCLUSIONS:** Environmental temperature has an effect on the change in figures of heart attack cases, thus, we believe, it plays an important rople in the disease.

PCV19

THE TIME OF SUNRISE AND HOURS WITH DAYLIGHT MAY HAVE AN EFFECT ON THE SEASONALITY AND DIURNAL VARIATION OF A HEART ATTACK

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OBJECTIVES: The time of onset of a myocardial infarction shows seasonal and daily variation. We aimed to investigate whether the number of hours with daylight has an effect on the seasonal variation of heart attack, and whether the time of sunrise has an effect on the diurnal rhythm of myocardial infarction. **METHODS:** We carried out a retrospective database study covering all patients admitted to any acute care hospital with the diagnose of myocardial infarction in Hungary in years 2004 and 2005 ($n = 32.329$). Data was collected from the database of the National Health Insurance Fund Administration according to the International Classification of Diseases (ICD). Data on the time of sunrise and sunset was collected from the Hungarian National Meteorological Service. **RESULTS:** With consideration to seasonal variation, the peak period of a heart attack was found during the spring season, with lowest number of events during the months of summer. The number of hours with daylight showed a weak negative correlation with the occurrence of myocardial infarction ($r = -0.108$, $p < 0.05$). With consideration to diurnal variation, the peak period of daily events was between 6–12 in the morning (35.57 %). We have found a positive correlation between the time of sunrise and sunset and the occurrence of myocardial infarction ($p < 0.01$). **CONCLUSIONS:** Based on our findings, the number of hours with daylight and the time of sunrise may be connected with the chances of having a heart attack, however other factors may also have an influence.

PCV20

PREDICTED CARDIOVASCULAR EVENT REDUCTION WITH THE CO-ADMINISTRATION OF FENOFIBRIC ACID AND STATINS IN A DYSLIPIDEMIA PATIENT COHORT

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OBJECTIVES: To predict total 3-year cardiovascular event (CVE) rates for treatment with fenofibric acid in combination with statins versus statin monotherapy in a cohort of dyslipidemia patients. **METHODS:** A disease outcomes model was used to predict 3-year CVE rates in a cohort of 1000 dsylipidemia patients. Risk of primary and secondary CVEs (MI, stroke, angina) was based on published risk equations from the Framingham Heart Study, which were adjusted to incorporate the impact of triglycerides (TG) in addition to high-density lipoprotein cholesterol and total cholesterol. The impact of TG was based on